

Comments of KCC Staff  
October 4, 2004

## ATTACHMENT N

Attachment RLS-6

*AT&T*  
*Kansas - Loops*

**AT&T Wholesale Home****:: AT&T WHOLESAL SERVICE****DATA SERVICES****IP SERVICES****VOICE SERVICES****SATELLITE  
SERVICES****CONTACT US**

We understand that the current changes in the telecommunications industry worldwide present real concerns for you as a service provider. AT&T Wholesale Services offers the necessary depth, breadth and experience in global wholesale communications to reduce your concerns about service continuity and help you grow your business.

AT&T delivers the scale of a world-class network, the scope to design customer-defined solutions and the skill of globally deployed professionals. Our customer support team provides an integrated customer experience and leverages industry knowledge to ensure the viability of your business. AT&T combines the strengths of both traditional products and IP for the wholesale market. We offer a comprehensive portfolio of wholesale Voice, Data, and IP services. Now is the time to leverage AT&T's world-class quality services for your customers' global telecommunications needs. Download the AT&T Wholesale Services Overview.

For more information on AT&T Service Provider Services, call your AT&T Account Representative or contact us online.

**Did you know...**

AT&T's global network connects over 230 countries and territories, carries over 40 billion minutes of wholesale voice traffic annually and includes more than 400 correspondents and suppliers worldwide.

# AT&T wholesale services



## AT&T Data Services for Service Providers

With experience that spans more than a century, AT&T understands the unique business needs of service providers. We work with carriers, cable companies, mobile operators and ISPs to meet the specific requirements of your customers on a global basis, while maintaining a strong local feel. We have the infrastructure and resources, plus a global presence in 60 countries, to help you maximize reach and efficiency. Operating in a rapidly evolving marketplace where the pressures of global competition dictate the need for diverse global connectivity, AT&T Data Services offer a flexible portfolio of local, national and international data products and services — always with high levels of technical support that meet your needs as your network reacts to industry forces.

### Your Challenge is Our Business

Our U.S. domestic and international sales teams are segmented by geography and specialty to provide you with the data services product and coverage information that supports your needs. We are accessible, knowledgeable and speak your language. We are continually evolving our network and expanding our breadth of services to cover everything from Private Line to High Speed Packet Services (Frame Relay and ATM), with local, national, and global reach. We also offer powerful Web tools so you have available comprehensive network management information at the point-and-click of a mouse. We are focused on building a network to handle complex and mission-critical applications, emphasizing features that enhance key competencies and responding to fast-changing needs. In fact, through our commitment to solving data networking challenges, we design networks that fit the needs of you and your customers. Selecting from our data networking portfolio, we can help you customize and create, giving you and your customers the economies of scale that only a proven global service provider can.

### Powering Up with AT&T Strengths

When you choose AT&T, you know you also have the power of the AT&T network behind you. On an average day, the AT&T network handles more than 2500 terabytes of data. Our frame relay network consistently achieves a 99.99% performance rating. We optimize a combination of bilateral and alternate routes to more than 230 countries and territories, with over 400 correspondents or suppliers. In the U.S., we

### **Want a truly global data network provider? Connect with AT&T.**

More than ever, now is the time to leverage AT&T's world-class quality services for your customers' data networking needs. We have the infrastructure and resources, plus over 100 years of industry experience, to give your customers security and availability. AT&T Wholesale data networking products offer fast and reliable service — anytime, anywhere — at competitive prices for our wholesale customers.

have more than 61,000 route-miles of fiber (enough to circle the globe twice). AT&T's depth of services has been recognized in the industry, "AT&T remains the player to beat in the business communications space, enjoying a position as the biggest seller to large enterprises and the carrier with the fullest portfolio of data services available." -Yankee Group, July 2002.

We were the first to deliver Frame Relay-to-ATM Service Interworking. We not only introduced the award-winning IP-Enabled ATM, but our IP-Enabled Frame Relay Service was the first MPLS-based product in the U.S.

## An Overview of AT&T Data Services

AT&T has been here to strengthen data networks for as long as any business in America has been networking. From Private Line to Frame Relay to ATM Services, from local to global to secure Internet Access, we've developed a rich portfolio that can bolster your networks' footprint and capabilities. Whether you are providing a simple T1 local connection, OC192 (10 Gbps) wavelength service or international FR/ATM, AT&T facilities can enable you to build flexibility, high reliability, performance, and scalability into your service offerings. As you review our services, remember that we continue to expand our offerings to include new technologies and provide more services to meet your ever-changing needs.

### AT&T Private Line Services

From Single Channel to OC192 Services for local or long haul communications, AT&T Private Line Services offer an array of choices, all with high availability and performance, plus the security only Private Line can assure. In the event of a service outage, we stand behind our Single Channel and Fractional T1 services with a Credit Allowance, while our T1 and T45 services are protected by a Service Assurance Warranty (SAW).

#### Bandwidth Options:

- Single Channel
- Fractional T1 and T1
- Fractional T45 and T45
- OC48 to OC192 Optical Wavelength Services
- Ethernet Services available at: 50Mbps, 150Mbps, 300Mbps, 1Gbps.

AT&T Private Line Services handle your demanding communications needs with AT&T's assurance of availability, reliability and performance.

**Think innovation is out of fashion in traditional carrier services? Don't tell that to AT&T.**

Options for AT&T Private Line Services cover access, diversity, reliability, network management and disaster recovery. The following is a sampling:

- Total Service includes the local access channel and delivers total end-to-end service through AT&T. With this option, AT&T handles total provisioning, maintenance, billing and support of dedicated access circuits as well as the Interoffice channels.
- AT&T Bandwidth Manager (ABM) provides a full spectrum of network management, bandwidth-on-demand and disaster recovery capabilities.
- Enhanced Reliability Option offers the strongest SAW in the industry, guaranteeing 99.99% service availability.
- Multiplexing allows you to combine network circuits over a common high-speed backbone to improve economic performance and optimize efficiency and utilization of the service.

## AT&T High-Speed Packet Services

For high-speed transport, high-level security and a network that can quickly scale to meet growth, AT&T offers flexibility around its industry-leading packet services.

- AT&T Frame Relay Service is based on frame relay technology and is provided over AT&T's ATM switching backbone for high-speed reliability, low congestion and consistent performance. Its rich feature set includes industry-leading SLAs, AT&T ReliaBURST® for traffic bursting beyond your committed information rate (CIR), virtually instantaneous rerouting around failures and Priority Egress Queuing (PEQ) to ensure that the most important communications transverse the network first.
- AT&T Frame Relay Plus provides you with a monitoring and network management window into your customers' networks, down to the application level.
- AT&T IP-Enabled Frame Relay Service maintains the privacy of the frame network while establishing any-to-any access to the Internet, intranets and extranets using MPLS technology.
- AT&T Frame Relay to ATM Service Interworking lets your customers transmit data between AT&T Frame Relay and ATM ports. This service is also useful for customers that wish to migrate from Frame relay to ATM at their own pace with no change in CPE.
- AT&T ATM Service can carry the most bandwidth-intensive applications across the network with ease, including videoconferencing, medical imaging, high-quality video for media applications and running voice across the data network at speeds up to 155 Mbps.
- AT&T IP-Enabled ATM assigns any-to-any access to the Internet, intranets and extranets while preserving the privacy of the ATM network.

#### **Reliability Options for AT&T Frame Relay and ATM Service:**

- Disaster Recovery Options build in protection against major failures with backup PVCs, access protection, direct links to disaster recovery centers and more.
- Diversity Options put in place redundancy connections such as POP diversity and switch diversity to ensure a continuous flow of network traffic.

#### **AT&T Local Services (Private Line, Frame Relay, ATM)**

- AT&T Local Private Line Service is a cost-effective solution for connecting multiple metro sites. – The available speeds are: DS0, DS1, DS3; OC3c, OC12c, OC48c, OC192c; STM-1, STM-4, and STM-16. Also Metropolitan Ethernet is available at speeds of 50Mbps, 150Mbps, 300Mbps, and 1Gbps.
- AT&T Local Frame Relay Service connects multiple sites within a metropolitan area requiring bandwidth up to T45 connectivity.
- AT&T Local ATM Service provides that same local connectivity among multiple metro sites, with increased speeds up to T45 and OC3 allowing for multimedia capabilities.

### **AT&T Access Services**

AT&T offers several Integrated Access Offers:

- AT&T ACCU-Ring<sup>®</sup> Network Access Service is a fully managed high-speed service which runs on a SONET infrastructure and provides two-way digital transmission for all local channel connections. These include AT&T Private Line, switched and enhanced services, Local Exchange Carrier and Interexchange Carrier traffic, as well as business premises-to-premises communications.
- Dedicated Entrance Facilities (DEF) provide a high capacity, dedicated communication path between a customer's premises and the AT&T Local Network Services (LNS) node, or between a customer's premises and a designated premises (two-node direct SONET interface configuration). It is offered in OC-3, OC-12 and OC-48 bandwidths at SONET rates. DEF also offers STM-1 and STM-4 handoffs. Since this service includes a dedicated, high capacity, customized network, it will be deployed where SONET facilities are available. If SONET facilities are not available, LNS Special Construction charges may apply.
- AT&T Ultravailable<sup>®</sup> Network, AT&T Ultravailable<sup>®</sup> Wavelength and AT&T Ultravailable<sup>®</sup> Managed OptEring Service<sup>™</sup> are fully managed, custom solutions for interconnecting your customer's data centers and business sites in a metropolitan area network (MAN) environment with the ability to extend the MAN into the WAN with the AT&T Ultravailable<sup>®</sup> Managed OptEring<sup>™</sup> Service. The network design and engineering provides the highest possible levels of availability, reliability and security, assuring your customer fail-safe business continuity with continuous operations and access to their information.

## AT&T Dark Fiber Offer

Dark, or unlit, fiber is purchased as a custom offering from AT&T. The dark fiber, consisting of non-zero dispersion-shifted fiber, is designed to support technologies as they evolve. The fiber terminates into the CPE that provides the necessary transmission speed – and the customer provides the required Optical Amplifier equipment.

## AT&T Dedicated (Leased) Transit

AT&T's Dedicated Transit (for voice, video, data or IP) allows international Facility-Based Carriers to traverse the US in order to connect sub sea cables, satellite earth stations or border crossings that touch the US. For example, if carrier A (in Europe) and B (in Asia/Pacific) exchange traffic via Japan - US and TAT 14, they would need a segment in the US to connect those two cables. Dedicated Transit allows them to send traffic from Europe to Asia/Pacific in a seamless fashion. (This is just one illustration and not the only example.)

An AT&T Dedicated Transit Facility is service agnostic. International Facility-Based Carriers can transmit voice, video, data or IP. AT&T's world class US domestic network provides a seamless extension of an administration's own network which allows for the initial establishment of a direct global link to administrations in other countries. Dedicated Transit is available in speeds from 64 Kbps through STM1. AT&T's self-healing, redundant network enables restorations to occur in milliseconds. Network maintenance is provided 24 x 7. Dedicated Transit offers three distinct paths across the US for East/West Coast connectivity.

## AT&T Sub Sea Cable

AT&T sells spare capacity in cables in which it has ownership to qualified International Facility-Based Carriers. Sub Sea Cable terms are usually an IRU (Indefeasible Right to Use) or less frequently leased capacity for a minimum of one year. Speeds offered are from 64 Kbps to STM-16. Sub Sea Cable service is non-regulated and non-tariffed, but subject to terms and conditions of the cables' C&MAs (Construction and Maintenance Agreements). AT&T also services and maintains cables in which it has an ownership interest. These facilities boast best in class maintenance and design. AT&T Sub Sea Cable Service can be bundled with AT&T Dedicated Transit and Backhaul Services.

For more information, contact your AT&T  
Representative or visit [www.att.com/wholesale](http://www.att.com/wholesale)





AT&T  
optical  
private line  
solutions

AT&T optical private line solutions

Dedicated to Carrying  
**Tomorrow's Applications**

 **AT&T** Business

"... demand is out there for IP and bandwidth, so we are on a 'build and fill' strategy."

– Mike Armstrong,  
CEO, AT&T



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## Benefits

- Dedicated, high-speed services for high-bandwidth applications
- Highly scalable configurations and access options
- Available nationwide with more than 50,000 fiber route miles
- Backed by AT&T's millisecond restoration capabilities
- AT&T SONET Maintenance Center available on a 24x7 basis

How does your business grow?

With better information, of course.

Which means you need to connect LANs to WANs for stronger communications

with wider audiences. Economically

converge voice and data traffic over

robust technologies such as asynchronous

transfer mode (ATM). Share heavy-duty

CAD/CAM applications that reduce

time-to-market. Extend mainframe

channels and make supercomputer file

transfers for mission-critical activities such

as data backup. Utilize full-motion video

for videoconferencing and visual imaging.

More than ever, businesses like yours are

looking toward emerging broadband

applications, with their extraordinary

flexibility to grow and enhance networks

for years to come. Broadband has the

speed and bandwidth to smoothly

perform all of the above -- and more.

Where do you go for world-class

communications solutions that solve

real-life business issues? Where you've

always gone. AT&T.

AT&T SONET Private Line Services give

you the highest-speed, best-of-breed

broadband communications capabilities,

ready to deploy when and where you

need them.

## AT&T Optical Solutions

SONET, or Synchronous Optical

Network, is a standards-based, fiber optics

transmission method that AT&T has

adopted and built into our highest-

capacity domestic digital service offering.

AT&T's adaptation provides a new level

of network intelligence that carries your

data, known as the "payload", as well as

control and monitoring information,

called "overhead", in one synchronous

data stream.

AT&T's optical solutions support the

fastest network speeds available today.

from 155 Mbps (OC3) to 9.953 Gbps

(OC192) -- 10 billion data bits per

second. We're currently expanding our

optical infrastructure with 16,500 miles

of our new "next-generation" fiber in

conjunction with our new two-tier

architecture – positioning our network to support OC768 services, four times faster than the OC192 of today's network.

This two-tier architecture is comprised of an ultra-capacity "express" overlay network with state-of-the-art SONET and optical networking technologies. It yields a 50% reduction in regeneration and multiplexing points, which in turn reduces points of failure and equipment costs.

In addition to high-speed transmission overall, AT&T utilizes Dense Wave Division Multiplexing (DWDM). This sophisticated technology lets us use different wavelengths of light to dramatically expand the bandwidth capacity of a single optical fiber – allowing each fiber to carry much more data, much more efficiently than ever before. In 2000, AT&T deployed DWDM systems with wavelengths of 64 to 80, and with 1,200 systems in place, AT&T offers the largest DWDM deployment in the world.

Plus, AT&T's optical solutions have extensive reach to your areas of network needs with more than 50,000 route miles, another 16,500 with the new next-generation fiber deployment, more than 115 physical rings (and still adding) and 240+ wavelengths ensure extensive coverage and higher reliability by limiting ring size.

## Reliability Right Down to the Ring

AT&T has always known that reliability of service is just as important to you as high speed. AT&T's restoration features on the network enable us to route around a failure in milliseconds, so fast that it's virtually unnoticeable to you and your users.

In addition, AT&T's optical solutions interface at your site and the AT&T network over two pairs of optical fiber. One pair acts as the service circuit – the service path – and the other is available as a standby protection circuit – the protection path. These redundant connections allow switching between the service path and protection path in the event of a circuit failure.

As an option, you can even benefit from diverse routing, building in extra protection should a failure occur.

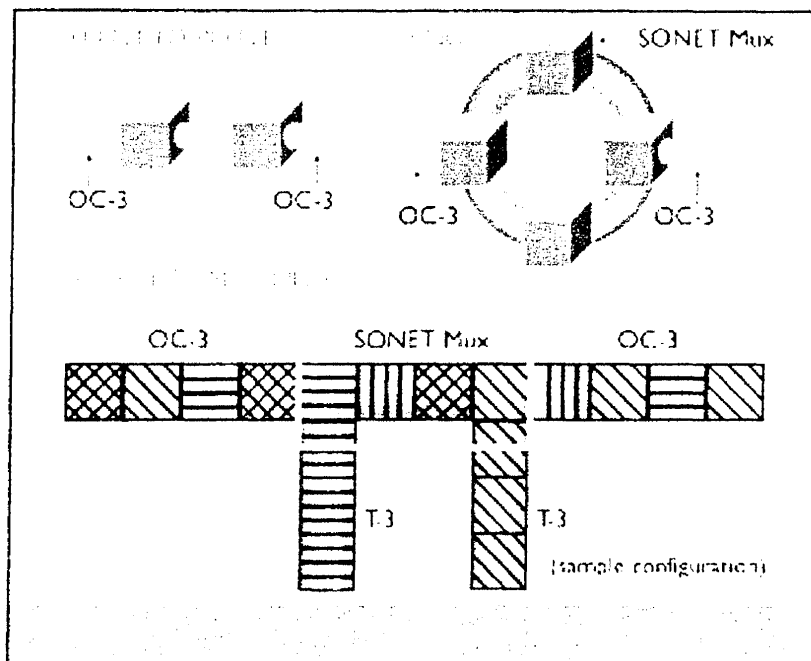
Adding to the assurance of reliability, AT&T monitors the AT&T Optical Network 24 hours a day. In addition, the AT&T SONET Maintenance Center is available on a 24x7 basis for service issues.

## Service Options for Expanding Revenue

AT&T's optical solutions are available in two configurations – an Interoffice Channel (IOC) circuit for a point-to-point, dedicated connection between two AT&T Central Offices (COs), or a Local Channel (LC) circuit. Each configuration comes with multiple access options that cover virtually every need your company might experience.

For extra value, the Multiplexing Office Function, an optional component, adds even greater flexibility.

Currently available for SONET OC3 and OC12 services, this AT&T Multiplexing option allows for channelization and an economical means to separate and transmit lower-capacity DS1, DS3 and/or OC3 signals. Which means you can more easily and efficiently segment your communications without sacrificing quality or quantity.



"... demand is out there for IP and bandwidth, so we are on a 'build and fill' strategy."

– Mike Armstrong, CEO, AT&T

## Support from the Leader

AT&T's state-of-the-art architecture, superior network technology and robust infrastructure make us the industry leader in optical services – now and with a clear plan for an optical switched network as technologies evolve in the future. As you devote your resources to developing new business opportunities, you can rely on AT&T for world-class support.

With more fiber miles, more built-in redundancy features and a comprehensive Service Level Agreement, the AT&T Private Line Service Assurance Warranty,

we can carry your next-generation communications where they need to go – reliably, efficiently and at unbelievable speeds.

\*Availability of speeds, features and options may vary depending on location.

**For more information,  
contact your AT&T Account  
Representative or AT&T  
Alliance Program Agent.  
Call 1-800-288-3199  
or visit our web site at  
[www.att.com/ipservices](http://www.att.com/ipservices).**



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